

IN THE CLAIMS

Please cancel claims 1-20 and replace them with new claims 21-38.

1.-20. (Canceled)

21. (NEW) A craze resistant wire coating composition for magnet wires comprising:

1) a solvent solution of a polyamideimide polymer composition formed by the reaction of an aromatic diisocyanate, 0.75 mole percent to 100 mole percent of trimellitic anhydride, and one or more acid, anhydride, or hydroxy functional reactants selected from the group consisting of benzophenonetetracarboxylic anhydride, p-phthalic acid, o-phthalic acid, m-phthalic acid, 4,4'-oxy-bisbenzoic acid, poly(acrylonitrile-co-butadiene)dicarboxy terminated, adipic acid, diphenylsilanediol, tris(2-hydroxyethyl)cyanurate, cyanuric acid and melamine derivatives, or a vinyl terminated silicone oil in an organic solvent wherein the aggregate amount of the trimellitic anhydride and the other acid, anhydride or alcohol functional reactants is substantially the stoichiometric equivalent of the amount of the diisocyanate; and

2) dispersed in said polymer solution, a particulate component selected from a fluropolymer and a mineral filler.

22. (NEW) The coating composition of claim 21 wherein at least one of the reactants is a hydroxyfunctional compound selected from the group consisting of diphenylsilanediol, tris(2-hydroxyethyl)cyanurate, cyanuric acid, and melamine derivatives.

23. (NEW) The coating composition of claim 21 wherein at least one of the reactants is benzophenonetetracarboxylic anhydride.

24. (NEW) The coating composition of claim 21 wherein at least one of the reactants is a diacid selected from the group consisting of p-, o-, and m-phthalic acid 4,4'-oxy-bisbenzoic acid, poly(acrylonitrile-co-butadiene)dicarboxy terminated and adipic acid.

25. (NEW) The coating composition of claim 21 wherein the amount of trimellitic anhydride used as a reactant is at least 0.85 mole percent based on the amount of the diisocyanate.

26. (NEW) The coating composition of claim 25 wherein the reactants include at least two unique diacid reactants.

27. (NEW) The coating composition of claim 25 or claim 26 wherein the reactants include benzophenonetetracarboxylic anhydride.

28. (NEW) The coating composition of claim 21 wherein the amount of trimellitic anhydride used as a reactant is at least 0.95 mole percent based on the amount of the diisocyanate.

29. (NEW) The coating composition of claim 28 wherein the reactants include at least one diacid.

30. (NEW) The coating composition of claim 28 or claim 29 wherein the reactants include at least one dihydroxy functional reactant, at least one trihydroxy functional reactant or benzophenonetetracarboxylic anhydride.

31. (NEW) The coating composition of claim 21, claim 22, claim 23, claim 24, claim 25, claim 26, claim 28 or claim 29 wherein the particulate component is polytetrafluoroethylene.

32. (NEW) The coating composition of claim 21, claim 22, claim 23, claim 24, claim 25, claim 26, claim 28 or claim 29 wherein the particulate component is a mineral filler.

33. (NEW) The coating composition of claim 31 further including a mineral filler.

34. (NEW) A craze resistant wire coating composition for magnet wires which comprises

a solution of a polyamideimide polymer formed by the reaction of a diisocyanate with a reactant mixture comprising trimellitic anhydride, at least one diacid and diphenylsilanediol in an organic solvent; and

dispersed in said polymer solution, a particulate component selected from the group consisting of a fluoropolymer and a mineral filler.

35. (NEW) A magnet wire comprising a conductor element and a coating of the composition of claim 34.

36. (NEW) A magnet wire comprising a conductive element coated with a composition of claim 21, claim 22, claim 23, claim 24, claim 25, claim 26, claim 28 or claim 29.

37. (NEW) A magnet wire according to claim 35, further including a base layer selected from the group consisting of a polyamideimide and a polyester positioned between the conductive element and the layer of craze resistant wire coating composition.

38. (NEW) A magnet wire according to claim 36, further including a base layer selected from the group consisting of a polyamideimide and a polyester positioned between the conductive element and the layer of craze resistant wire coating composition.